IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method of forming a film upon a substrate by means of [[the]] a laser evaporation method wherein a laser beam is shined upon a target placed within an evacuated deposition chamber, so that target material in [[the]] a portion of the target surface irradiated by said laser beam evaporates, and said evaporated target material is deposited upon [[the]] a surface of [[a]] the substrate supported by a substrate holder within said deposition chamber, said method of forming the film upon [[a]] the substrate being characterized in comprising the steps of:

in a preliminary step, obtaining in advance information on [[the]] a distribution of a thickness of a film deposited upon a test substrate prepared for use in collecting information over a fixed irradiation time while shining said laser beam upon said target in the state in which there is a fixed positional relationship between the spatial positions of said test substrate and [[the]] a point of incidence of said laser beam upon said target, or while shining said laser beam upon said target while rotating said test substrate, and then;

in a main step, adjusting [[the]] a deposition time at each relative positional relationship based on the film-thickness distribution information obtained in advance in the preliminary step while spatially moving or rotating the substrate or substrate holder about a specific central axis of rotation relative to the point of incidence of said laser beam to said target, or while performing both said relative rotation and said relative movement, and solving an inverse problem using a uniform or a desired film-thickness distribution and the film-thickness distribution information obtained in advance at each relative position, to thereby determine the deposition time at each relative position.

Claim 2 (Currently Amended): A method of forming a film upon a substrate according to claim 1 ~~characterized in that~~ <u>wherein</u>:

the positional relationship is such that the centerline of the plume emanating from said target does not intersect said substrate.

Claim 3 (Currently Amended): A method of forming a film upon a substrate according to claim 1 ~~characterized in that~~ <u>wherein</u>:

said film-thickness distribution information is collected a plurality of times with the fixed positional relationship itself varied between said test substrate and the point of incidence of said laser beam upon said target.

Claim 4 (Currently Amended): A method of forming a film upon a substrate according to claim 1 ~~characterized in that~~ <u>wherein</u>:

said adjustment of the deposition time is based on adjustment of the irradiation time of said laser beam.

Claim 5 (Currently Amended): A method of forming a film upon a substrate according to claim 1 ~~characterized in that~~ <u>wherein</u>:

said adjustment of the deposition time is based on one or both of adjustment of the speed of revolution when continuously rotating said substrate, and adjustment of the movement speed when performing the relative movement of said substrate.

Claim 6 (Currently Amended): A method of forming a film upon a substrate according to claim 1 ~~characterized in that~~ <u>wherein</u>:

said relative rotation is achieved by rotating said substrate or said substrate holder about its center.

Claim 7 (Currently Amended): A method of forming a film upon a substrate according to claim 1 ~~characterized in that~~ <u>wherein</u>:

said relative movement is achieved by moving said substrate or said substrate holder as a whole.

Claim 8 (Currently Amended): A method of forming a film upon a substrate according to claim 1 ~~characterized in that~~ <u>wherein</u>:

said relative movement is achieved by varying the light path of said laser beam and moving the spatial position of said point of incidence upon said target.

Claim 9 (Currently Amended): A method of forming a film upon a substrate according to claim 1 ~~characterized in that~~ <u>wherein</u>:

during said deposition, said target is moved within the plane containing said target on the condition that said laser beam is constantly incident.

Claim 10 (Currently Amended): A method of forming a film upon a substrate according to claim 1 ~~characterized in that~~ <u>wherein</u>:

a plurality of said laser beams is used.

Claim 11 (Currently Amended): A method of forming a film upon a substrate according to claim 9 ~~characterized in that~~ <u>wherein</u>:

there is also a plurality of said targets, and at least one or more laser beams shines

upon each one of said plurality of targets.

Claim 12 (Currently Amended): A method of forming a film upon a substrate

according to claim 1 characterized in that wherein:

a plurality of substrates is supported by said substrate holder.

Claim 13 (Currently Amended): A method of forming a film upon a substrate

wherein deposition is performed while a substrate or a substrate holder supporting said

substrate within a deposition chamber is moved or rotated relative to [[the]] a source of

supply of deposition materials about a specific axis of rotation, or while performing both

relative rotation and relative movement, said method of forming the film upon [[a]] the

substrate characterized in that comprising the steps of:

in a preliminary step, obtaining in advance information on [[the]] a distribution of a

thickness of a film deposited upon a test substrate prepared for use in collecting information

over a fixed material supply time while in the state in which there is a fixed positional

relationship between [[the]] spatial positions of said test substrate and a reference point upon

said deposition material supply source, or while rotating said test substrate, and then;

in a main step, adjusting said material supply time at each relative positional

relationship based on the film-thickness distribution information obtained in advance in the

preliminary step while spatially moving or rotating the substrate or substrate holder about a

specific central axis of rotation relative to said deposition material supply source, or while

performing both said relative rotation and said relative movement, and solving an inverse

problem using a uniform or a desired film-thickness distribution and the film-thickness

distribution information obtained in advance at each relative position, to thereby determine

the deposition time at each relative position.

Claim 14 (Currently Amended): A method of forming a film upon a substrate

according to claim 13, ~~characterized in that~~ wherein:

~~said film-thickness distribution information is collected a plurality of times with the~~

~~positional relationship itself varied between said test substrate and said deposition material~~

~~supply source~~ an equation for solving the inverse problem is represented by

$$C(r) = \sum_{i=1}^{N} B_i(r) \times t_i$$

where C(r) represents a function of the uniform or desired film-thickness distribution

with respect to a distance r from the center of rotation of the substrate;

the film-thickness distribution information obtained in advance is represented by $B_i(r)$

that is a film-thickness distribution per unit time at an i-th position ($1 \leq i \leq N$, where N

represents the number of relative positions), and t_i represents a deposition time at the i-th

position;

selecting a combination of t_i for obtaining the uniform or desired film-thickness

distribution; and

determining the selected combination t_i as the deposition times at the respective

positions i.

Claim 15 (New): A method of forming a film upon a substrate according to claim 1

wherein:

an equation for solving the inverse problem is represented by

$$C(r) = \sum_{i=1}^{N} B_i(r) \times t_i$$

where C(r) represents a function of the uniform or desired film-thickness distribution with respect to a distance r from the center of rotation of the substrate,

the film-thickness distribution information obtained in advance is represented by $B_i(r)$ that is a film-thickness distribution per unit time at an i-th position ($1 \leq i \leq N$, where N represents the number of relative positions), and t_i represents a deposition time at the i-th position;

selecting a combination of t_i for obtaining the uniform or desired film-thickness distribution; and

determining the selected combination of t_i as the deposition times at the respective positions i.

Claim 16 (New): A method of forming the film upon the substrate according to claim 1 wherein:

in the preliminary step,

i) a point at which the line normal to the target from the laser beam incidence point T_0 toward the surface of the test substrate prepared for use in collecting information intersects a plane containing the test substrate is represented by coordinates (X, Y) with a center of the test substrate as an origin o (0, 0), and

N (more than one) arrangements on the test substrate represented by the coordinates (X, Y), a normal vector r_a extending from the coordinate point toward the incident point T_0, and an angle of incidence θ of the laser beam are selected,

ii) the laser beam is shined on the target at the selected arrangements i ($1 \leq i \leq N$), and the film-thickness of the deposit produced upon the substrate within a unit time without rotating the test substrate are obtained for every arrangement, and

the film-thickness distribution at the respective arrangements i is represented by a

function $A_i(r, \theta_f)$ of polar coordinates r, θ_f from the center of rotation of the substrate or

substrate holder at the respective arrangements i, and

iii) the film-thickness distribution upon the substrate within a unit time, exhibited

when rotating the substrate or substrate holder about its central axis at the selected

arrangements i ($1 \leq i \leq N$), is represented by a function of the radius r

$B_i(r) = (1/2\pi)\int_0^{2\pi}A_i(r, \theta_f)d\theta_f$

to thereby obtain the film-thickness distribution information in advance.

Claim 17 (New): A method of forming a film upon a substrate according to claim 1

wherein:

in the preliminary step,

i) a point at which the line normal to the target from the laser beam incidence point

T_0 toward the surface of the test substrate prepared for collecting information intersects a

plane containing the test substrate is represented by coordinates (X, Y) with a center of the

test substrate as the origin o (0, 0), and

N (more than one) arrangements on the test substrate represented by the coordinates

(X, Y), a normal vector r_a extending from the coordinate point toward the incidence point T_0,

and an angle of incidence θ of the laser beam, with r_a and θ fixed, are selected,

ii) the laser beam is shined on the target in the state in which the positional

relationship between the spatial positions of the test substrate and the laser beam incidence

point T_0 upon the substrate is fixed to (X_0, Y_0), the film-thickness distribution of the deposit

produced upon the substrate within a unit time is obtained, and the film-thickness distribution

is represented by a function $A_0(r, \theta_f)$ of polar coordinates r, θ_f from the center of rotation of

the substrate holder or substrate, and

iii) the film-thickness distribution upon the substrate within a unit time, exhibited when rotating the substrate or substrate holder about its central axis at the selected arrangements j ($1 \leq j \leq N$), is represented by a function

$$B_j(r) = (1/2\pi)\int_0^{2\pi}A_0(r', \theta_f')d\theta_f$$

where $r' = \{(r\cos\theta_f - x_s)^2 + (r\sin\theta_f - y_s)^2\}^{1/2}$;

$$\tan\theta_f' = (r\sin\theta_f - y_s)/(r\cos\theta_f - x_s);$$

$$x_s = X_j - X_0;$$

$$y_s = Y_j - Y_0,$$

to thereby obtain the film-thickness distribution information in advance.

Claim 18 (New): A method of forming a film upon a substrate according to claim 1 wherein:

in the preliminary step,

i) a point at which the line normal to the target from the laser beam incidence point T_0 toward the surface of the test substrate prepared for use in collecting information intersects a plane containing the test substrate is represented by coordinates (X, Y) with a center of the test substrate as the origin o (0, 0), and

N (more than one) arrangements on the test substrate represented by the coordinates (X, Y), a normal vector r_a extending from the coordinate point toward the incident point T_0, and an angle of incidence θ of the laser beam are selected,

ii) the film-thickness distribution upon the substrate within a unit time, exhibited when rotating the substrate or substrate holder about its central axis at a uniform speed at the selected arrangements i ($1 \leq i \leq N$), is directly obtained, and

the film-thickness distribution within a unit time at the respective arrangements i is represented by a function $B_i(r)$ of a radius from a center of rotation of the substrate holder or substrate, to thereby obtain the film-thickness distribution information in advance.